CLINICAL PRACTICE STANDARD — Aeromedical Operations
AO.CLI.21 – Pre-Hospital Mission Work Flow

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Contents	**Clinical Practice Standard** AO.CLI.21 – Pre-Hospital Mission Work Flow
	Appendices
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Directorate	Aeromedical Operations
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Summary	This procedure provides guidance on the key roles and tasks for each member of the medical team in a prehospital mission.
Applies to	NSW Ambulance aeromedical clinical crews
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Related Legislation	Nil
Related Documents	Nil

Compliance with this operating procedure is mandatory

CLINICAL PRACTICE STANDARD — Aeromedical Operations
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1. Purpose

This procedure provides guidance on the key roles and tasks for each member of the medical team in a prehospital mission.

Optimal management of patients in the pre-hospital environment requires efficient patient assessment and performance of selected meaningful interventions, whilst minimising scene and transport times. All critically injured patients benefit from addressing pathophysiologic insults as soon as possible, and most of these interventions can be performed safely in the pre-hospital phase of their care. A minority of patients have injuries that require definitive care in the operating theatre; these patients may require expedited transfer to a trauma centre with minimal pre-hospital intervention. Environmental, clinical and logistic details vary job by job, however there are key tasks that are common to the majority of pre-hospital missions. Well articulated task allocation helps to ensure maximal simultaneous activity while safeguarding against critical omissions in clinical management.

This procedure should be read in conjunction with ***AO.CLI.16*** *– Pre-hospital Scene Safety,* ***AO.CLI.13*** *– Pre-hospital Trauma Triage and* ***HELI.OPS.43*** *– Helicopter Paramedic Medical Authorisation Pathway.*

2. Procedure

2.1 Mission priorities: the basic elements of a pre-hospital mission are:

- Command and Control
- Safety
- Communication
- Assessment
- Triage
- Treatment
- Transport

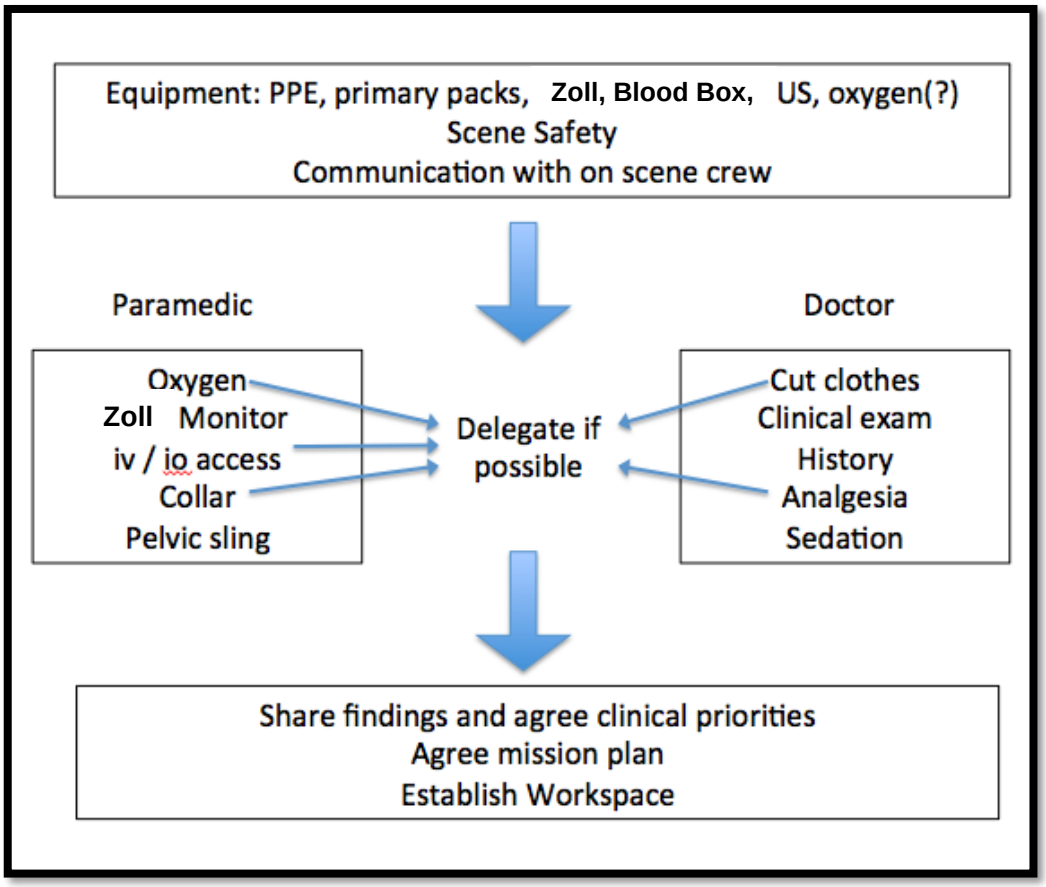
2.2 Scene safety and communication:

Due to their familiarity with the pre-hospital environment and emergency services procedures, the Critical Care Paramedic has overall responsibility for the safety of the medical team, as well as liaison with Incident Command and other assets at the scene. The medical team should remain within visual and verbal contact of one another for the duration of the mission where possible. If separation is required (eg for multiple patients or limited access) communication methods and timeframes should be established. Similarly the paramedic should establish primary and secondary means of communication (eg GRN, mobile phone) with the aviation crew prior to separation from the helicopter. Retrieval doctors on prehospital missions must be independently capable of effective use of communication tools (radio, phone) with other members of crew.

2.3 Initial Assessment:

In the mission planning and en-route phases, clinical and logistic details should be sought by way of ETHANE and MIST reports if available. The medical team should discuss equipment requirements and formulate a plan/allocate tasks, where possible adhering to the outline given below.

At the initial handover, establish the particular indication for a medical team presence. In conjunction with the Ambulance Commander, determine the availability of Ambulance and other emergency service resources, and what clinical roles can be assigned to these individuals.



2.4 Space and Equipment Control:

After initial assessment and immediate interventions have been performed, the medical team should articulate the clinical plan and an agreed timeframe. In conjunction with the Ambulance Commander, the Critical Care Paramedic should determine an optimal workspace for complex clinical procedures, eg RSI, and have oversight of patient movement and equipment set up. Only those procedures necessary for immediate patient safety should be performed with the patient on the ground in situ as the first step in most resuscitations is to move the patient to enhance workspace; the risk/benefit of any intervention that would not necessarily change

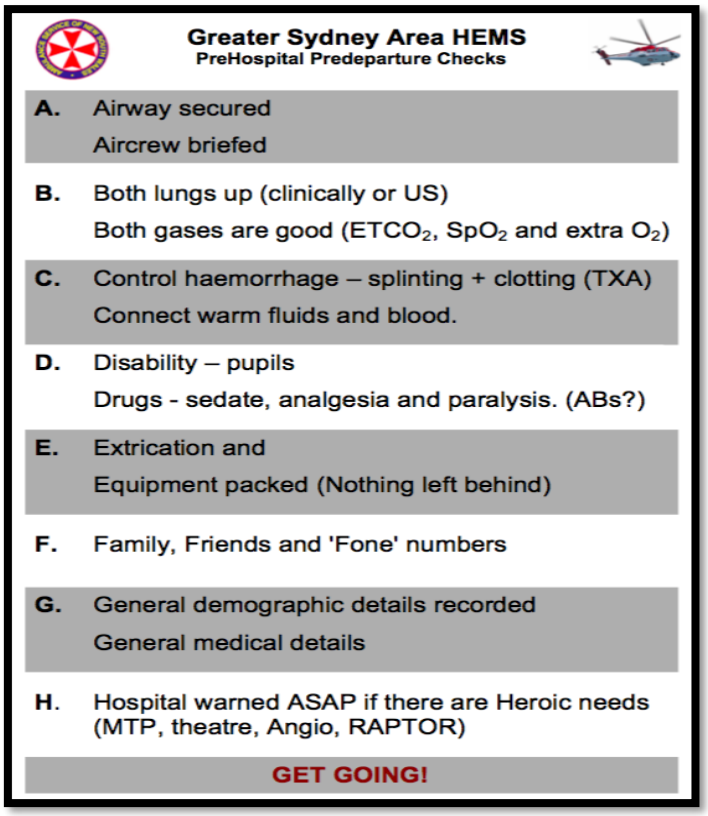
management or destination should be carefully considered. All team members should attempt to keep all medical equipment in a contained area to avoid breakage or loss. Early communication with the aircrew should occur if further equipment is required to be brought from the aircraft.

2.5 Post Intervention Care:

Following the completion of necessary clinical interventions (ie intubation) in the prehospital environment, a sense of urgency should accompany final A-H checks and preparation for departure from scene. It is common for a lapse in momentum to occur at this stage in a mission. Ongoing vigilance is required to safeguard against accidental extubation or other mishaps as the patient is packaged and prepared for transport.

Communication with the aircrew should occur early post intubation; briefing to include the fact that patient is now intubated requiring a timely departure, the chosen destination hospital to assist with flight planning and early notification of hospital helipad services. Any particular requirements for cabin layout, such as ventilator set up or other equipment, should also be communicated to the aircrew as soon as possible.

The following Action card outlines the recommended checks and interventions that may be required after completion of necessary clinical interventions:



Greater Sydney Area HEMS
PreHospital Predeparture Checks

A.	Airway secured Aircrew briefed
B.	Both lungs up (clinically or US) Both gases are good ($ETCO_2$, SpO_2 and extra O_2)
C.	Control haemorrhage – splinting + clotting (TXA) Connect warm fluids and blood.
D.	Disability – pupils Drugs - sedate, analgesia and paralysis. (ABs?)
E.	Extrication and Equipment packed (Nothing left behind)
F.	Family, Friends and 'Fone' numbers
G.	General demographic details recorded General medical details
H.	Hospital warned ASAP if there are Heroic needs (MTP, theatre, Angio, RAPTOR)

GET GOING!

2.6 Pre-departure phase:

Once at the aircraft, maximal simultaneous activity should continue, and a sense of clinical urgency communicated as necessary to all present whilst maintaining at least one clinical crew with “eyes on” patient and monitoring throughout. Onlookers should be thanked for their assistance then cleared. Hearing protection for the patient and crew should be applied early, allowing the pilot in urgent cases to perform engine start whilst the medical crew don the rest of their PPE and finalise patient packaging and gear stowage. Once the cabin is secure there should be minimal further delays to final pre-flight checks and actual departure.

2.7 En-route phase:

One member of the clinical team should be specifically assigned to monitor the patient and their condition continuously. Initial patient setup in the cabin should include only necessary interventions and equipment re-arrangement, as much of this can be accomplished en-route. Patient monitoring and care takes precedence over documentation.

Preparations for landing, unloading and transfer to the relevant hospital clinical area should be anticipated and completed early as much as possible.

2.8 Arrival Phase:

The Critical Care Paramedic and aircrewman are generally responsible for the logistics of unloading the patient and confirming sufficient portable oxygen is available for the transfer to the hospital area. The retrieval doctor should continue to monitor the patient and ensure necessary therapies are continued without interruption.

Clinical handover occurs after the patient reaches the relevant clinical area in the hospital. It should be given, once (usually by the retrieval doctor), to the most senior hospital clinician present (“Team Leader”). The order of handover and patient transfer to the hospital bed should be clearly confirmed by direct discussion between the retrieval doctor and receiving hospital clinician. Any urgent interventions necessary should be communicated early and clearly. Any further dissemination of clinical information should occur between hospital clinicians; the retrieval doctor should not repeat the handover for the benefit of late-arriving hospital clinicians.

Documentation (the retrieval mission case-sheet) should be left with the receiving hospital team prior to departure, unless a further urgent mission is tasked, in which case a fax number should be obtained for future transmission as soon as possible.

2.9 Clean-up and preparations for Return to Base (RTB):

Both the Critical Care Paramedic and doctor are responsible for ensuring that all retrieval equipment is present and if possible restored to usable condition prior to transfer back to the helipad.

The Critical Care Paramedics should communicate with the Aeromedical Control Centre prior to departure from the hospital helipad, indicating the

team's status and ability/limitations of attempting any further possible missions prior to RTB. The aircraft cabin and equipment should if possible be restored to mission-ready prior to take off.

2.10 RTB and preparation for next mission:

On arrival back at base, the clinical crew and aircrew should clearly communicate the order of actions and who is responsible. These will generally include returning the aircraft to mission-ready (refuel, cleaning, restocking), debrief, database entry, mission debrief forms and ensuring crew needs are met (food, hydration etc).

APPENDICES

N/A

REVISION HISTORY

Version (Document #)	Amendment notes
Version 2.0 05 June 2024 WI2024-047	Updated for Zoll Monitor Highlighted comms between CCP and ACC during helo operations
Version 1.3	No edits on review
WI2020-121 Version 1.2 Issued 4 November 2020	Updated pre departure checklist Minor formatting changes Approved by A/Executive Director, Aeromedical Services
Version 1.1 Issued January 2015	Transition to new format Updated for Zoll X-Series Approved by Executive Director, Health Emergency & Aeromedical Services
Version 1.0 Issued 2014	Approved by Executive Director, Health Emergency & Aeromedical Services